

New Ideas to Help Auto Workers

POPULAR SCIENCE MONTHLY awards each month a prize of \$10, in addition to regular space rates, for the best idea sent in for motorists. This month's prize goes to Kenneth Murray, Sturgis, Mich. (Figure 3). Contributions are requested from all auto mechanics.

IN OLD cars it appears necessary frequently to touch up the breaker points. Many times this trouble is caused by a burning away of the end of the distributor arm which causes a long jump in the distributor. Building out this burned-away portion with solder is a semi-permanent cure for this trouble.

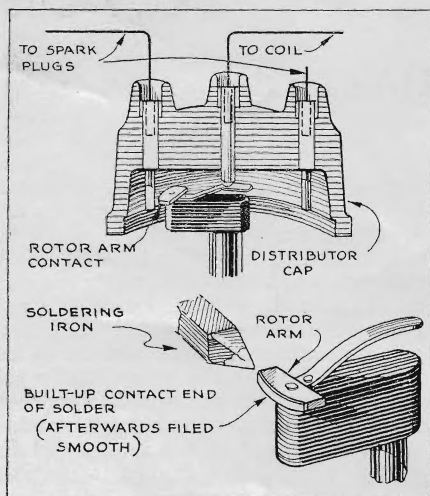


Fig. 1. Shows how to build up, with solder, the burned away end of distributor arm in an old car and make it run.

LEAKING VALVE

WHEN the exhaust valve is leaking badly a quantity of exhaust gas is drawn back through the valve during the intake stroke. If the motor is allowed to idle at the slowest possible speed, and a piece of paper is held over the end of the exhaust pipe, the leaking valve will cause the paper to be sucked against the end of the pipe.

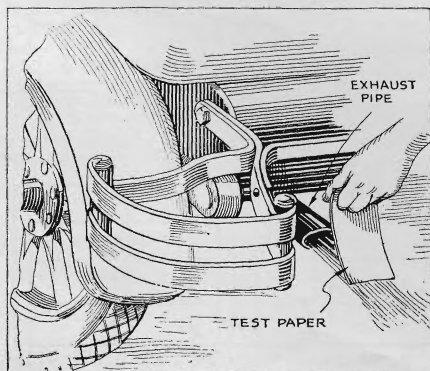


Fig. 2. If a valve is leaking badly, it can be detected at the exhaust pipe.

ACID MAY HELP

IN SOME sections of the country, the water deposits a hard white scale on the interior surface of the radiator. Ordinary cleaning compounds are of no use in such cases. As a last desperate resort try filling the radiator with a ten percent solution of hydrochloric acid. The acid will dissolve the scale but it also attacks the metal of the radiator to some extent. If you are lucky the scale will be removed before the radiator is eaten through.



A heavy scale in radiator may be removed by ten percent solution of hydrochloric acid.

ICY WINDSHIELDS

OF THE many simple methods of preventing ice from forming on the windshield, one of the simplest is shown in Fig. 4. Take a small bag of ordinary table salt and tie it to the shaft of the wiper so that it will just touch the glass at the upper edge of the path of the rubber squeegee. This will melt the ice.

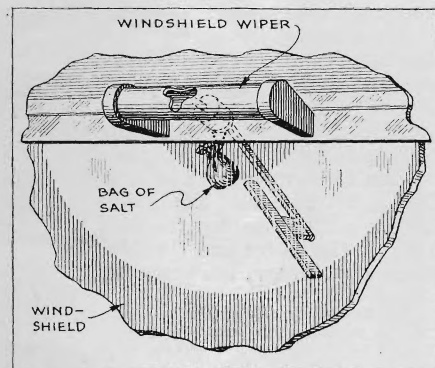


Fig. 4. A bag of ordinary table salt attached to windshield wiper will keep ice off glass.

SIMPLE PRIMER

FIGURE 5 shows an easy-to-install priming arrangement that can be applied to almost every car. Remove the fitting that attaches the vacuum line to the windshield wiper and substitute a short length of pipe and priming cup as indicated.

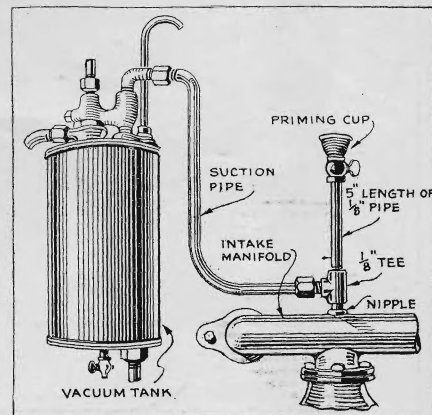


Fig. 5. This simple primer, which attaches to vacuum line, is easy to install in most cars.

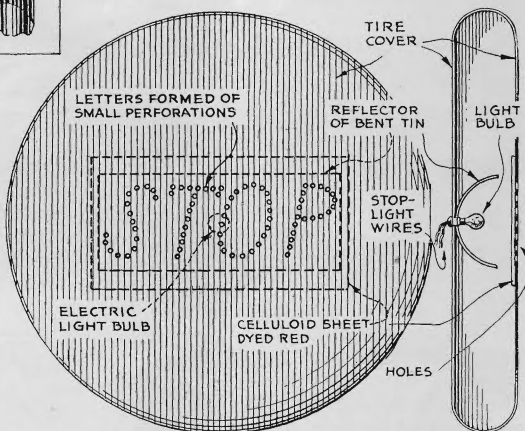


Fig. 3. This stop light is made by punching holes in tire cover and fitting bulb behind it.

NOVEL STOP LIGHT

FIGURE 3 shows how to make a stop light that disappears when not lighted and, because of the large letters, can be seen for a great distance. Punch a series of small perforations in the tire cover to form the letters of the word "stop." Cover on the inside with a sheet of red celluloid. Fit a tin reflector and a powerful headlight bulb back of the letters and connect the bulb to the usual stop light switch. This should make a peculiarly efficient stop signal, as it appears at the most desirable height and directly in front of driver in the rear.